

# ASSIGNMENT 1

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Textbook Assignment: "Introduction to Exercise and Training (ET) Mines," chapter 1, pages 1-1 through 1-4; "Actuation Mines," chapter 2, pages 2-1 through 2-23; and "Laying, Handling, Shop, Hunting, and Mechanical Sweep Mines," chapter 3, pages 3-1 through 3-11.

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| <p>1-1. Exercise and training mines look and act like service mines and provide activities with the means of improving their training in the areas of mine assembly, delivery, and mine countermeasures,</p> <p>1. True<br/>2. False</p> <p>1-2. Who is responsible for the monitoring of the use of ET assets?</p> <p>1. CNO<br/>2. COMOMAG<br/>3. COMINWARCOM<br/>4. COMNAVSEASYSOM</p> <p>1-3. The basic allowances for ET mines are established in which of the following instructions?</p> <p>1. OPNAVINST 8550.9<br/>2. COMOMAG/MOMAGINST 8550.9<br/>3. COMINWARCOMINST 8550.1<br/>4. COMOMAG/MOMAGINST 3120.2</p> <p>1-4. Mines to be used for training should be requested from what activity?</p> <p>1. CNO<br/>2. SPCC<br/>3. COMNAVSEASYSOM<br/>4. Nearest MOMAG</p> | <p>1-5. Indicates the activity's capability to support the ET program.</p> <p>1. A<br/>2. B<br/>3. C<br/>4. D</p> <p>1-6. Is submitted by the final preparation team upon arrival at the supporting activity, but only if problems arise that might effect the mission.</p> <p>1. A<br/>2. B<br/>3. C<br/>4. D</p> <p>1-7. Is submitted within 48 hours after the mine recovery phase.</p> <p>1. A<br/>2. B<br/>3. C<br/>4. D</p> <p>1-8. Upon completion of an exercise, a trip report will be submitted upon return and within what time frame?</p> <p>1. 2 days<br/>2. 5 days<br/>3. 12 hours<br/>4. 48 hours</p> <p>1-9. Which of the following statements is incorrect with regards to the IRE mine?</p> <p>1. It contains instrumentation to ease in recovery<br/>2. It records the time of actuation<br/>3. It is identical to the ET mine<br/>4. It uses only serviceable components</p> |
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- IN ANSWERING QUESTIONS 1-5 THROUGH 1-7, SELECT THE REPORT THAT IS DESCRIBED IN THE QUESTION. ANSWERS MAY BE USED MORE THAN ONCE OR NOT AT ALL.
- A. Trip report  
B. Situation report  
C. Mine case inventory report  
D. Preliminary post-analysis report

- 1-10. To assess the effectiveness of surface and airborne mine countermeasure systems, which of the following ET mines would be used?
1. Laying
  2. Hunting
  3. Actuation
  4. Versatile exercise
- 1-11. Which of the following ET mines can assist in the development of new sensors and mine sweeping tactics?
1. Mechanical sweep mine
  2. Versatile exercise mine
  3. Handling mine
  4. Shop mine
- 1-12. ET mines can be assembled and stored in how many assembly configurations?
1. One
  2. Two
  3. Three
  4. Five
- 1-13. One type of ET mine that is used primarily to support the total weapon concept training in exercises and in war games at sea is the
1. laying mine
  2. hunting mine
  3. actuation mine
  4. mechanical sweep mine
- 1-14. What are the two types of actuation mines?
1. Service and nonservice
  2. VEMS and simulators
  3. Laying and nonlaying
  4. Flight and nonflight
- 1-15. The Mk 52 Mod 2 actuation mine employs which of the following detection systems?
1. Magnetic only
  2. Acoustic and magnetic only
  3. Pressure and magnetic only
  4. Magnetic, acoustic, and pressure
- 1-16. Instead of the mine exploding, how does the actuation mine indicate a mine actuation?
1. It releases a locator float
  2. It actuates a pyrotechnic signal
  3. It releases a recovery float
  4. All of the above
- 1-17. The Mod 2 detection system uses which of the following firing mechanisms?
1. Mk 20
  2. Mk 21
  3. Mk 46
  4. TDD 57
- 1-18. The Mk 20 Mod 1 firing mechanism requires that an attenuator plug be installed or it will not function. Which of the following attenuator plugs provides the maximum attenuation?
1. 1
  2. 2
  3. 3
  4. 6
- 1-19. The amplifier of the Mk 20 firing mechanism consists of what two main parts?
1. Oscillator and look relay
  2. Oscillator and bridge network
  3. Look relay and bridge network
  4. Bridge balance and look relay
- 1-20. To fire the Mk 52 Mod 2 mine, both the initial look and the reverse look are required.
1. True
  2. False
- 1-21. As the strength of the ship's magnetic field decreases, what happens to the search coil current?
1. Increases
  2. Decreases only
  3. Reverses direction only
  4. Decreases and reverses direction

1-22. The Mk 55 Mod 5 actuation mine detection system is comprised of which of the following components?

1. Mk 3 depth compensator only
2. Mk 21 firing mechanism only
3. Mk 21 firing mechanism and Mk 6 hydrophore only
4. Mk 3 depth compensator, Mk 21 firing mechanism, and Mk 6 hydrophore

1-23. The Mk 3 depth compensator is a hydrostatically operated, electromechanical switching device.

1. True
2. False

1-24. For the signaling and recovery gear to operate reliably on an actuation mine in water less than 40 feet deep, the bottom must be hard or have less than how many feet of sediment?

1. 1
2. 2
3. 3
4. 4

1-25. If the Mk 52 actuation mine is to be recovered without divers, it has a fixed maximum water depth of how many feet?

1. 25
2. 30
3. 40
4. 200

1-26. Information on components that are unique to ET mines is found in which of the following publications?

1. NAVSEA SW550-AA-MMI-010
2. NAVSEA SW550-AE-MM1-010
3. NAVSEA SW550-FO-PMS-010
4. NAVSEA SW023-AB-WHS-010

1-27. The Mk 10 Mod 0 ET sterilizer contains how many, if any, timing elements?

1. One
2. Two
3. Four
4. None

1-28. The Mk 39 Mod 1 control box is an electrochemical timing and switching device that controls the overall operation of the mine in its armed condition.

1. True
2. False

1-29. The Mk 17 Mod 0 drill float has how many feet of nylon mooring line?

1. 20
2. 2
3. 100
4. 200

1-30. The Mk 17 drill float contains how many feet of recovery line?

1. 100
2. 200
3. 220
4. 400

1-31. The drill float shield assembly has how many float-ejection springs?

1. Five
2. Two
3. Three
4. Four

IN ANSWERING QUESTIONS 1-32 THROUGH 1-34, SELECT THE ILLUMINATION SIGNAL DESCRIBED IN THE QUESTION. ANSWERS MAY BE USED MORE THAN ONCE OR NOT AT ALL.

- A. Mk 25
- B. Mk 115
- C. Mk 116
- D. Mk 125

1-32. Produces green smoke for about 70 seconds, followed by green flame for about 25 seconds.

1. A
2. B
3. C
4. D

1-33. Produces yellow smoke for about 70 seconds, followed by yellow flame for about 25 seconds.

1. A
2. B
3. C
4. D

1-34. Releases white smoke and flame.

1. A
2. B
3. C
4. D

1-35. The Mk 64 Mod 3 switch delay contains (a) how many resistors for making time-delay settings of (b) what duration?

- |           |                       |
|-----------|-----------------------|
| 1. (a) 13 | (b) 1 to 49 days      |
| 2. (a) 13 | (b) 1 hour to 49 days |
| 3. (a) 24 | (b) 1 week to 49 days |
| 4. (a) 24 | (b) 1 to 49 hours     |

1-36. The Mk 64 switch delay uses which of the following batteries?

1. Mk 1
2. Mk 63
3. Mk 135
4. Mk 143

1-37. The Mk 17 recovery float is released by the actuation of which of the following explosive fittings?

1. Mk 1
2. Mk 18
3. Mk 19
4. Mk 20

1-38. The smoke signal in the recovery float is released by the actuation of which of the following explosive fittings?

1. Mk 20
2. Mk 19
3. Mk 18
4. Mk 9

1-39. The Mk 25 Mod 0 signal data recorder has the capability of storing how many events?

1. 123
2. 143
3. 153
4. 163

1-40. The explosive fitting in the drill shield is connected to the instrument rack through the tail cover by the use of which of the following cables?

1. CA-449
2. CA-450
3. CA-465
4. CA-1832

1-41. The Mk 87 sonar transmitter operates at what frequency?

1. 35 to 43 kHz
2. 43 to 53 kHz
3. 50 to 60 Hz
4. 55 to 65 Hz

1-42. The Mk 87 sonar transmitter is capable of transmitting a signal for (a) how many yards for (b) how many days?

- |              |        |
|--------------|--------|
| 1. (a) 1,200 | (b) 2  |
| 2. (a) 2,000 | (b) 20 |
| 3. (a) 2,000 | (b) 25 |
| 4. (a) 2,500 | (b) 30 |

1-43. The Mk 52 actuation mine uses (a) what fairing and (b) what parachute pack for high-speed delivery?

- |              |           |
|--------------|-----------|
| 1. (a) Mk 19 | (b) Mk 35 |
| 2. (a) Mk 19 | (b) Mk 36 |
| 3. (a) Mk 20 | (b) Mk 35 |
| 4. (a) Mk 20 | (b) Mk 36 |

1-44. Aircraft and submarine crews use which of the following ET mines to practice mine planting techniques?

1. Shop
2. Laying
3. Hunting
4. Mechanical sweep

1-45. For information concerning the different types of laying mines, you should refer to which of the following publications?

1. NAVSEA SW550 AA-MM1-010
2. NAVSEA SW550-AE-MMI-010
3. NAVSEA SW550-AE-MM1-020
4. NAVSEA SW550-AE-MMI-050

1-46. The Mk 87 sonar transmitter is located inside the instrument compartment of which of the following laying mines? “

1. Mk 25 only
2. Mk 36 only
3. Mk 25 and Mk 36
4. Mk 52 and Mk 55

1-47. There are how many versions of the Mk 52 and Mk 55 laying mines?

1. One
2. Two
3. Three
4. Four

1-48. The modified tail cover with an 8-inch ring welded to the top gussets is used on the Mk 52 and Mk 55 mines for which of the following reasons?

1. To aid in surface planting of the mine
2. To aid in the attachment of a hook during recovery by EOD
3. To allow sea lions equipped with a grabber mechanism to recover the mines
4. All of the above

1-49. When the mammal recovery attachment is used on the Mk 55 mine, how many sonar transmitters are used, if any?

1. One
2. Two
3. Three
4. None

1-50. What color is the anchor on the Mk 56 laying mine?

1. White
2. Orange
3. Olive drab
4. Original color

1-51. The Mk 56 laying mine has (a) how many stripes of (b) what size?

- |          |            |
|----------|------------|
| 1. (a) 2 | (b) 3 inch |
| 2. (a) 2 | (b) 4 inch |
| 3. (a) 3 | (b) 3 inch |
| 4. (a) 3 | (b) 4 inch |

1-52. The Mk 60 laying mine is issued to the fleet in how many operational assemblies?

1. One
2. Two
3. Three
4. Four

1-53. A Mk 63 laying mine uses an inert-loaded Mk 32 arming device and a functional Mk 42 firing mechanism.

1. True
2. False

1-54. The mine locator float contains how many feet of nylon twine?

1. 100
2. 150
3. 200
4. 225

1-55. The leader of the mine locator float is how long?

1. 12 inches
2. 18 inches
3. 2 feet
4. 4 feet

IN ANSWERING QUESTIONS 1-56 THROUGH 1-60, SELECT THE ET MINE DESCRIBED IN THE QUESTION. ANSWERS MAY BE USED MORE THAN ONCE OR NOT AT ALL.

- A. Shop
- B. Hunting
- C. Handling
- D. Mechanical sweep

1-56. It contains no sonar transmitter and is painted bronze.

- 1. A
- 2. B
- 3. C
- 4. D

1-57. It is used to provide proficiency in mine sweeping.

- 1. A
- 2. B
- 3. C
- 4. D

1-58. Any inert laying mine can be used for this type of ET mine.

- 1. A
- 2. B
- 3. C
- 4. D

1-59. It is used to develop proficiency in mine assembly and testing.

- 1. A
- 2. B
- 3. C
- 4. D

1-60. It is painted blue.

- 1. A
- 2. B
- 3. C
- 4. D